directed upwards. Gular scales very feebly keeled. A light band bordering the upper lip; a light band along each side of the back.

Two specimens from Port Essington.

# 4. Lophognathus maculilabris, sp. n.

Snout not longer than the distance between the orbit and the posterior border of the ear. Nostril equally distant from the orbit and the tip of the snout. Dorsal scales all obliquely directed upwards. Gular scales strongly keeled. An irregular light band from below the eye to the shoulder; lips and lower surfaces maculated with blackish.

Two specimens from the Timor Laut Islands.

# XXVII.—Neuroptera of the Hawaiian Islands.—Part I. Pseudo-Neuroptera. By ROBERT MCLACHLAN, F.R.S. &c.

In this and in the paper on Neuroptera-Planipennia that will follow it I propose to give the results of the working-out of two small collections formed by the Rev. Thomas Blackburn in the islands, combined with such information as had been previously obtained from a few species taken by Mr. G. F. Mathew, R.N., a few existing in the British Museum from the results of Captain Beechey's voyage, and some other sources. As Mr. Blackburn has now left the islands, after a residence in them of several years, it may be some time before another opportunity occurs for a still further examination of their insect productions.

A general summary will appear with Part II. of this paper.

In Part I. seventeen species are considered, viz. two of Termitidæ, one of Embidæ, two of Psocidæ, and twelve of Odonata (or dragonflies). The Ephemeridæ and Perlidæ are not represented; but I cannot believe they are totally absent.

The two Termitidæ are probable importations from America; so also may be the single species of Embidæ. Of the Psocidæ one is probably endemic, the other may be an introduction from America (but the materials are too small). Of the dragonflies (Odonata), one is nearly cosmopolitan; two others are North-American species of powerful flight, and probably endowed with migratory instincts; one rather large species of Libellulina is apparently endemic; the Agrionina are no doubt strictly endemic, and form the most interesting (and at the same time most puzzling) feature of the Neuropterous fauna.

### Termitidæ.

#### Calotermes castaneus, Burm.

Calotermes castaneus, Burm.; Hag. Monogr. p. 38.

Two examples, gummed on card (Blackburn, No. 18).

A widely distributed species in America, ranging from California to Chili. In the Hawaiian individuals the wings expand to about 33 millim., their colour pale (almost whitish), and in the posterior wings the median nervure originates at about the basal fourth of the subcosta. These points are mentioned as the species appears to be variable.

#### Calotermes marginipennis, Latr.

Calotermes marginipennis, Latr.; Hag. Monogr. p. 47.

Two examples, gummed on card (Blackburn, No. 11).

A species recorded from Mexico and California. The Hawaiian examples are of small size (expanse 20 and 25 millim. respectively), but they agree otherwise, especially in the median nervure being nearly equidistant between the subcosta and submedian.

#### Embidæ.

## Oligotoma insularis, n. sp.

Body entirely pitchy fuscous; mouth-parts inclining to reddish; clothed with fine whitish pubescence. Head gently convex above, with no discal depression. Eyes large, coarsely faceted, black. Antennæ fuscous, annulated with whitish at the sutures, more than 18-jointed (mutilated), basal joint short and stout, second still shorter but much thinner, the succeeding joints elongate, slender, obconical. Pronotum more than twice as long as broad, much narrower than the head, the sides slightly dilated in the middle, the anterior portion slightly narrowed; a transverse impressed line anteriorly before the margin. Meso- and metanota nearly equal, each much longer and broader than the pronotum. Anal styles long and slender (asymmetric), the joints nearly equal. Legs pitchy fuscous, clothed with whitish pubescence; trochanters, knees, and tarsi pale testaceous.

Wings narrow, pale fuliginous, the coalescent subcosta and radius dark fuscous; rest of the venation fuscescent; sector simply furcate from about its middle in the anterior wings (much sooner in the posterior), the radius confluent with its upper branch before the apex; apparently no costal nervules; three nearly equidistant nervules between the upper branch of the sector and the radius; five complete whitish vittæ, one placed in each of the principal areas.

Length of body (much extended) 7-8 millim.; expanse  $11\frac{1}{2}-12\frac{1}{2}$  millim.

Three examples, gummed on card (*Blackburn*, Nos. 12 and 19).

The Indian O. Saundersii, Westw., has the body testaceous.

A specimen in my collection from Antigua (*T. A. Marshall*) is so similar to *O. insularis* that I hesitate to separate it therefrom; this has been erroneously recorded as a *Mantispa* (!) (cf. Proc. Ent. Soc. Lond. 1878, p. xxxiv).

### Psocidæ.

## Psocus, sp.?

One unexpanded specimen, on card, with the wings gummed together, appears to me incapable of identification. It is probably very close to the European *Ps. bifasciatus*, Latr. (also found in North America); and were it not for a difference in the markings of the head, it might (in its present condition) be considered identical therewith; perhaps even it is really that species. (*Blackburn*, without No.)

### Elipsocus vinosus, n. sp.

(Body destroyed.) Antennæ (fragments) apparently blackish, slender. Legs pinkish (or very pale claretcoloured); tibiæ and tarsi with rows of minute black tubercles, the bases of fine short hairs.

Wings vitrcous, scarcely tinged (under the microscope the membrane is seen to be studded with very minute closelyplaced black points); neuration apparently reddish brown; pterostigma elongate, gradually dilated to the oblique apex, *bright claret-coloured*; posterior marginal cellule large, subtriangular, the apex rounded. In the posterior wings the neuration appears to be blacker.

Expanse about  $4\frac{3}{4}$  millim.

One much mutilated example, gummed on card (*Blackburn*, No. 13).

N.B.—Nothing but the insular habitat, combined with the presence of apparently striking characters, could have induced me to bestow a name upon this mutilated specimen.

#### Odonata.

### LIBELLULINA.

# Pantala flavescens, F.

A nearly cosmopolitan species; found universally within the tropics (*Mathew*, *Blackburn*, &c.).

#### Tramea lacerata, Hagen.

A North-American species, extending to Mexico (Mathew, Blackburn).

# Lepthemis Blackburni, n. sp.

Wings quite hyaline, very shining, both pairs yellow (slightly olivaceous) at the base nearly or quite up to the triangles; this colour more intense and more extended outwardly in the subcostal and median areas, not extending to the anal angle in the posterior wings. Neuration entirely black, the costal nervure black outwardly. Pterostigma long (4 millim.), greyish yellow (brown when very adult), between thickened deep black nervules. Eleven or twelve antecubital and nine postcubital nervules in the anterior wings; a supernumerary nervule in the anterior wings (not in the posterior). Sectors of the arculus with a short petiole. Discoidal triangle in the anterior wings rather broad, traversed by one or, exceptionally, by two nervules; inner triangle with three cellules (in the posterior wings the discoidal triangle may be either free or traversed by a nervule; inner triangle absent or abnormally present); three rows of posttrigonal cellules. Membranule whitish cinereous. Posterior wings moderately dilated at the base. The network of all the wings fine and close.

Head: face pale yellow, clothed with erect black hairs; an isolated transversely oval shining black spot on the top of the front, and a broad band of the same colour in front of the ocelli; labium and a broad inner margin on each of the side lobes black; labrum black at its base and with a narrow black margin in the female (or with only the narrow black margin, male); occiput blackish, yellow behind; back of head shining black, with three yellow spots on either side, fringed with a strong crest of einereous hairs.

Prothorax black (with an indistinct median yellow spot), its posterior lobe *very large*, slightly emarginate in the middle (hence indistinctly bilobed), with a median im-Ann. & Maq. N. Hist. Ser. 5. Vol. xii. 17 pressed line, fringed with a long and thick crest of cinereous hairs.

Thorax deep opaque black above, clothed with cinereous hairs; an oval antehumeral isolated yellow spot on each side anteriorly, scarcely touching the anterior margin, and a transverse cuneiform yellow spot on each side posteriorly, margining the thoracic cavities, which are also yellow; interalar space spotted with yellow. *Sides of thorax metallic green*, with seven large yellow spots arranged in two series (three and four); posterior margin also yellow; pectus spotted with yellow.

Legs deep black (brownish in a somewhat immature example), long and slender; femora with only short spines, but with very long cinereous hairs; tibiæ with long and close slender spines; inner tooth of claws rather strong, placed not far below the apex.

Abdomen slender, greatly dilated at the base to the end of the third segment; second and third segments with a median suture. Colour bronzy black; second segment with a large median posterior brownish-yellow spot, divided anteriorly, third with a large median dorsal band of the same colour (in the male these dorsal markings are continuous with the pale sides, so that almost the entire segments are pale; in the female the dorsal markings and pale sides are separated by the black ground-colour); a small anterior brownish-yellow geminate spot on the fourth to sixth; on the seventh this spot enlarges and occupies nearly the whole of the dorsal portion of the segment, and on the eighth becomes small again, forming two small anterior lines (very indistinct in the male); ninth with two indistinct anterior points (obliterated in the male), and there is a small marginal point on the tenth.

♂. Genitalia of second segment concealed, but the sidepieces are long, obtuse, and finger-shaped, with a tuft of long cinereous hairs. Superior appendages as long as the last two segments, black, cylindrical, gently curved, the apical portion gently dilated, the apex oblique, very acute, and turned slightly upward; on the lower edge is a series of about eight small teeth or tubercles. Inferior appendage elongate-triangular, extending beyond the teeth of the superior, its apex emarginate with acute angles.

9. Appendages not so long as the ninth segment, black, straight, cylindrical, somewhat dilated towards the apex, which is acute and prolonged; the inflated ventral tubercle densely clothed with cinereous hairs. Vulvar scale adpressed, flat, longer than the ninth segment, its apex semicircular and slightly outstanding. Length of abdomen,  $\Im$  38 millim.,  $\Im$  40 millim.; length of posterior wing,  $\Im$  38 millim.,  $\Im$  39 millim.; expanse,  $\Im$ 77 millim.,  $\Im$  80-84 millim.

I have examined one male and two females (*Blackburn*, No. 16).

Mr. Blackburn says, "This dragon-fly is widely distributed, but not common. It occurs at various elevations from near the sea-level to at least 4500 feet. I have taken it on nearly all the islands." I think it must be considered a really indigenous species; at any rate I know of nothing like it.

The precise position of the species is perhaps open to doubt in the present uncertain state of the classification of Libellulina. At first sight it has somewhat the aspect of a *Dythemis*, but the large posterior lobe of the prothorax precludes any such affinity. In the form of the prothorax, slender abdomen with much inflated base, and general aspect it may be located in *Lepthemis* as that elastic genus is now constituted; it principally differs therefrom in the broader discoidal triangle of the anterior wing, in the longer and more slender tibial spines, and in the form and position of the inner tooth of the claws. There appears to be no other defined group with a similar prothoracic formation in which it can be placed.

#### ÆSCHNINA.

## Anax junius, Drury.

This common North-American species (which has been also recorded from Kamtschatka and North China) appears to be general in the islands. In examining a series of American examples with regard to the anal appendages of the males, I find a certain amount of slight variation that may be partly individual, partly local, in its nature. In two Hawaiian males before me the inferior appendage appears to me to be distinctly shorter and more deeply excised in the middle than in the American specimens; even if this should prove to be constant, it is of no specific value.

#### Anax strenuus, Hagen.

Anax strenuus, Hagen, Verh. zool.-bot. Ges. in Wien, 1867, p. 34.

The type is a female taken during the Danish 'Galathea' expedition, and is in the Copenhagen Museum. It would appear to differ from A. *junius* principally in its greater size (expanse "136 millim.," as opposed to "95–112 millim." in *junius*) and in slight colour characters. Hagen considers the

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discovery of the male necessary in order to establish the species with certainty.

Mr. Blackburn once informed me that he had seen (but was unable to capture) an *Anax* that appeared to be larger than *junius*.

#### AGRIONINA.

### Agrion (?) xanthomelas, Selys.

Agrion (?) xanthomelas, Selys, Synop. Agrionines, légion Agrion, suite, p. 174 (1876).

Originally described from specimens found by Mathew. "Occurs near Wailuku, Mani" (*Blackburn*, No. 28).

### Varieties.

1. The antehumeral reddish band narrower than in the type, strongly interrupted posteriorly into a point of exclamation, not connected posteriorly with the sutural band, and hence not furcate; a small median isolated black spot on the pale sides of the thorax. The blackish transverse band on the ninth segment broader.

2. The postocular occipital line totally obliterated, hence the top of the head is entirely black. Thoracic lines as in var. 1, and there is a large median isolated black spot on the sides of the thorax. Ninth segment with nearly its posterior half black above.

A male of each variety taken by Mr. Blackburn with the type form (also numbered 28), agreeing entirely therewith save in the points mentioned. The obliteration of the postocular line in var. 2 is important, considering the weight given to this character from a classificatory point of view; for my part I incline to the opinion that much undue weight is accorded to it, and that it is eminently artificial.

### Agrion (?) hawaiiense, n. sp.

Wings hyaline, rather acute; neuration black. Pterostigma lozenge-shaped, surmounting slightly more than the cellule below it, brownish black, slightly paler at the edges. Quadrilateral having the superior edge about one third the length of the inferior in the anterior wings, one half in the posterior. Seventeen or eighteen postcubital nervules in the anterior wings, fourteen or fifteen in the posterior. Four cellules between the quadrilateral and the nodus.

Dark bronzy green.

Hcad black above, with isolated oval orange-yellow post-

ocular spots. Labium pale yellow. Labrum shining black, but its anterior margin broadly yellow (so that it is half black, half yellow); a broad yellow band occupies the vertical portion of the rhinarium; margins of the orbits in front broadly yellow; basal joint of antennæ yellow beneath, and there is a yellow spot below it; back of the head black.

Prothorax black, yellow at the junction with the head, with a large yellow spot above the anterior legs. In the male the posterior margin is gently rounded, with a minute median noteh, narrowly yellow, which expands into a spot on either side. In the female the margin is thickened and broadly yellow, slightly elevated in its middle, with a distinct median notch in the centre of the elevated portion; in this sex there are two small round discal yellow spots (which are absent in the male).

Thorax bronzy green above. In the male there are four small yellow spots, two anterior and two posterior (with or without humeral lines); in the female there is a distinct narrow yellow humeral line, connected with the spots anteriorly but abbreviated posteriorly. Sides yellow, with a broad black median band, which is furcate towards the anterior wings and encloses a yellow spot. Pectus black, yellow in the centre.

Legs black, femora and anterior tibiæ yellow beneath; spines black, long and divaricated, seven or eight on posterior tibiæ.

Abdomen slender, bronzy green above, passing into yellowish at the sides and ventrally. First and second segments broadly yellow on the sides, enclosing on the first a greatly curved black line, which is nearly circular in outline; all the segments from the second to ninth with a narrow anterior yellowish sutural ring, which passes into obscure reddish on the apical segments; tenth segment nearly wholly obscure reddish.

3. Margin of tenth segment broadly excised in the middle. Superior appendages slightly longer than the segment, nearly forcipate, stout, the apices curved inward and obtuse, divaricate, internally much dilated in more than the basal half beneath; black externally, the dilated internal basal portion reddish. Inferior appendages nearly one half shorter, elongately triangular, but gradually attenuate and nearly acute, turned upward and inward; black, but reddish at the base.

**Q**. Appendages short, black, conical. Valvules large, reddish, their appendages short.

Length of abdomen,  $\mathcal{J}$  33 millim.,  $\mathcal{Q}$  32 millim.; length of posterior wing,  $\mathcal{J}$  23 millim.,  $\mathcal{Q}$  24 millim.; expanse,  $\mathcal{J}$  47<sup>1</sup>/<sub>2</sub> millim.,  $\mathcal{Q}$  51 millim. "Oahu, at no great elevation above the sea" (*Blackburn*, two males, one female, No. 16).

The two males vary somewhat in the markings of the head and thorax. In one the postocular spots are nearly obliterated and bluish (instead of yellow or orange), and on the thorax the markings are also bluish, and the humeral lines are distinct, as described for the female, whereas they are wanting in the other. They are certainly specifically identical.

The precise location of this species must remain doubtful. On the one hand it approaches *Nehalennia* in its slender form and bronzy colour, but the anal characters of the male appear to preclude such a position; on the other hand, the long tibial spines would seem to indicate affinity with *Argia*.

# Agrion (?) pacificum, n. sp.

Wings hyaline, obtuse; neuration black. Pterostigma lozenge-shaped, scarcely covering the cellule beneath it, reddish brown. Quadrilateral having its superior edge about one third the length of the inferior in the anterior wings, and fully half the length in the posterior. Twelve to fourteen postcubital nervules in the anterior wings, eleven in the posterior. Three cellules between the quadrilateral and nodus.

Dull black.

Head small, totally black above (no postocular spots). Labium and margin of labrum yellowish; orbits broadly yellowish (or greenish) exteriorly. Back of head black.

Prothorax having its posterior margin slightly and obtusely elevated in the middle in both sexes. In the male there are two approximate nuchal spots, two distant discal, and two very large, one on each side of the margin, orange or yellow. In the female the margin is also yellow on each side of the produced portion.

Thorax with no humeral lines, but with a yellow (or orange) humeral spot posteriorly. Sides with two broad yellow (or orange) bands—one superior and anterior, abbreviated at about the middle, but with a corresponding minute posterior spot; the other inferior and posterior, proceeding about halfway from the wings and then abbreviated. Pectus black.

Legs black; femora brownish beneath; spines long and divaricated, about six on the posterior tibiæ.

Abdomen slender, black ; a large reddish or yellow spot on each side of the first and second segments ; eighth and ninth with a broad reddish anterior ring, and the posterior margin of the tenth narrowly reddish in the male (in the female these segments are wholly black), the ring on the ninth occupying nearly half the segment; ventrally the segments have a narrow yellowish longitudinal border (more conspicuous in the female).

♂. The tenth segment has a broad triangular excision on its border. Superior appendages black, very short, stout, obtuse, excised below the apex internally. Inferior appendages black, long, subforcipate, turned inward, very acute; more than twice the length of the superior.

2. The appendages are very short, stout, conical, black. Valvules short, reddish varied with black, and with somewhat long black appendages.

Length of abdomen,  $328\frac{1}{2}$  millim., 925 millim.; length of posterior wing, 320 millim., 919 millim.; expanse, 341 millim., 938 millim.

"Lanai and Oahu, at various elevations" (Blackburn, two males, one female, No. 53).

Notwithstanding the entire absence of postocular spots or lines, I think this insect is allied to *A. xanthomelas*, on account of general (and especially anal) structure. Eliminating it from *Argia* (with which it has affinity on account of the long tibial spines), the absence of postocular spots would place it in *Erythromma*; but the small head, slender body, and anal characters are opposed to its location therein.

# Agrion (?) deceptor, n. sp.

Wings hyaline (or with the faintest smoky tinge in the adult), rather acute. Pterostigma longer than broad, surmounting two cellules, reddish brown. Neuration black. Quadrilateral having its superior edge one third the length of the lower in the anterior wings, nearly one half in the posterior. Twenty or twenty-one postcubital cellules in the anterior wings, fifteen to eighteen in the posterior. Five cellules between the quadrilateral and the nodus.

Head and thorax black. Abdomen bright red.

Labium dingy yellowish. A broad border to the labrum, broad anterior orbits, a broad band above the rhinarium, and a small line on the basal joint of antennæ beneath, yellowish or reddish. Postocular spots narrow, reddish, connected by a line. Posterior margin of prothorax having the sides broadly dilated, but the dilated portion is interrupted before the middle, leaving the apex of the discal portion projecting somewhat obtusely between the two portions. Neck, a large median triangular spet, and the broad dilated portion of the posterior margin red.

Thorax with a broad red antehumeral band, interrupted posteriorly in a point of exclamation, red, followed by a broader black humeral band Sides red with two yellowish lines, and two black bands connected at the intermediate legs. Pectus black.

Legs red; spines black, those on the tibiæ long and divaricate; apex of tarsal joints and tips of claws black.

Abdomen bright red, marked with black as follows:—A large quadrate spot at the base of the first segment, somewhat emarginate posteriorly, and a small spot on either side on the posterior suture; a narrow ring at the apex of segments 2 to 4; a broad ring at apex of segment 5; the whole of segments 6 to 8 (excepting a broad ring at base of 6 occupying about one sixth of its length, a narrow ring at apex of 7 and 8, and the sides of all three, broadly); a large irregular spot on each side of segment 9.

3. The margin of tenth segment is very oblique on either side, and with a sudden small triangular median excision. Superior appendages longer than the segment, black (red at the base internally), stout, the apices slightly incurved; internally the basal portion is much dilated for more than half their length, and at the apex of the dilated portion is a slight excision, leaving a formation as of two indistinct blunt teeth. Inferior appendages scarcely one half shorter, slender, slightly incurved, red, blackish at the tips.

**q**. Unknown.

Length of abdomen, ♂ 34 millim.; length of posterior wing 23 millim.; expanse 51 millim.

Oahu (*Blackburn*, one male, No. 67). Taken in company with *Megalagrion oceanicum* (vide post.), and sent by Mr. Blackburn under the same number. There is very great general resemblance; but the size, neural characters, &c. readily separate the two; the anal parts, although very similar, also present differences.

# Agrion (?) calliphya, n. sp.

Wings narrow, tinged with yellow; petiolated nearly up to the basal postcostal nervule in both pairs. Pterostigma lozengeshaped, surmounting rather more than one cellule, reddish brown. Quadrilateral elongate, its upper edge about half the length of the lower in both pairs. Postpterostigmatical cellules irregular, distinctly in two rows in the posterior wings. Sixteen or seventeen postcubital nervules in the anterior wings, thirteen or fourteen in the posterior. Four cellules between the quadrilateral and the nodus.

Head and thorax black. Abdomen red.

Front wholly reddish yellow, excepting a very narrow black line before the rhinarium. Postocular spots red, small, and nearly linear. Prothorax having its posterior margin gently rounded and narrowly red (otherwise black).

Thorax with the very narrow dorsal crest, and a narrow, slightly curved, continuous antchumeral line red, the latter followed by a broad black humeral band; sides red, with two yellowish lines (whereof the upper exists as a vestige at the base of the anterior wings); a black spot, and a narrow black mesothoracie sutural line. Pectus red.

Legs red; spines black, those on the tibiæ long and divaricate; apex of tarsal joints and tips of claws black.

Abdomen very slender, bright red; a large quadrate spot on the first segment, a narrow ring at the apex of the second to sixth (broader and expanding on the sides in the fifth and sixth), and an anterior lateral line on the seventh, black.

3. The margin of the tenth segment is shallowly excised in a semicircular manner. Superior appendages longer than the segment, very stout, blackish, red at the base; the apex very obtuse and curved inward; internally they are greatly dilated at the base, with a sort of blackish basal tubercle. Inferior appendages shorter, red with black tips, cylindrical, curved inward, and with a basal internal ventral dilatation.

9. Unknown.

Length of abdomen, 337 millim.; length of posterior wing  $24\frac{1}{2}$  millim.; expanse 51 millim.

"Lanai, about 2000 ft." (Blackburn, one male, No. 55).

In some respects this is the most aberrant of the red Hawaiian species, owing to its narrow wings and their greater amount of petiolation; the anal parts are, however, quite homologous.

# MEGALAGRION, n. g. (Légion Agrion.)

Inferior sector of the triangle originating before the basal postcostal nervule. Arculus continuous with the second costal nervule. Pterostigma lozenge-shaped, its lower edge shorter than the upper, surmounting two cellules. *Postcostal area* with two rows of cellules. Postcoular spots present, large.

Labium excised for about a third of its length.

Form robust, especially in the female.

Spines of the tibiæ long and strong; inner tooth of claws small.

Colour red.

No vulvar spine.

I have established this division for the reception of two of the most magnificent species of the Légion Agrion hitherto discovered. The double row of cellules in the postcostal area (and in *M. Blackburni* the neuration is still more irregular) exists only in *Hyponeura*, and the long tibial spines apparently show further affinity therewith; but the coloration is opposed, and the anal characters are in accordance with most of the other Hawaiian Agrionina.

# Megalagrion Blackburni, n. sp.

Wings hyaline in the slightly immature male, tinged with fuliginous in the female. Pterostigma surmounting two cellules (or two and a half), its lower edge very distinctly shorter than the upper, outwardly very oblique, reddish brown. Neuration black. Quadrilateral having its upper edge about one third the length of the lower in the anterior wings, about one half in the posterior (only about one fourth in both pairs in the female). A double row of postpterostigmatical cellules. Postcostal area with two complete series of cellules, and the inferior sector of the triangle is irregularly broken, so that there is a partially double series in the area between it and the superior sector. In addition to this the neuration in the apical half of the wing is often broken up into double series of cellules, in some places simulating interposed sectors. Thirty postcubital cellules in the anterior wing, and twenty-three in the posterior in the male, thirty-six and twenty-seven in the female. Eight or nine cellules between the quadrilateral and the nodus.

Head and thorax black, abdomen bright red.

Labium yellow. Labrum broadly margined with yellow, and the orbits anteriorly are broadly yellow. Postocular spots very large, rounded, connected by a line, reddish (yellowish in the semiadult male).

Prothorax having its posterior margin rounded (slightly elevated in the male), marked with reddish (or yellow) as follows:—neck, two median spots (geminate), a discal one either side of these, a large external one on either side, and the posterior margin.

Thorax with a narrow reddish (or yellow) antehumeral line connected anteriorly with an inner spot, and dilated posteriorly in a triangular manner; median crest very narrowly reddish (or yellow). Sides reddish (or yellowish), with two oblique black bands, whereof the upper is abbreviated. Pectus black.

Legs red (yellow in the semiadult male) with black spines; apex of tarsal joints and tips of claws black.

Abdomen deep red (less intense in the semiadult male), marked with black as follows :—In the male there is a spot at the base of the first segment, a narrow posterior ring on segments 2 to 6, expanding on the sides of the sixth, on the seventh the apex is broadly black, which is continued laterally for nearly the whole length, a large spot on the sides of the eighth; in the female the apical rings are more distinct, and there is a subapical narrower ring on the second to fourth segments, fifth with a broad apical ring enclosing a transverse spot of the ground-colour, sixth with a very broad apical band which is trifid anteriorly, seventh and eighth wholly black except at the sutures, ninth black at its base.

S. The tenth segment has a deep triangular excision on its margin. Superior appendages longer than the tenth segment; the lower dilated portion divided internally into two blunt teeth, whereof the upper is black; apical portion stout, incurved, obtuse, black. Inferior appendages more than half the length of the superior, cylindrical, the tips incurved and black.

2. The appendages are very short, stout, conical, black. Valvules moderate, not reaching the extremity of the abdomen, red, their appendages (broken) black.

Length of abdomen,  $\sigma$  47 millim.,  $\varphi$  42 millim.; length of posterior wing,  $\sigma$  32 millim.,  $\varphi$  36 millim.; expanse,  $\sigma$  69 millim.,  $\varphi$  74 millim.

"At the head of Wailuku valley, Maui" (*Blackburn*, one male, one female, No. 26).

In colour strikingly resembling Pyrrhosoma minium.

#### Megalagrion oceanicum, n. sp.

Wings hyaline. Pterostigma surmounting two cellules, very oblique on its outer edge, the lower distinctly shorter than the upper, reddish brown. Neuration black. Quadrilateral having its upper edge scarcely one fourth the length of the lower in the anterior wings, one third the length in the posterior. A single row of postpterostigmatical cellules. Postcostal area with simple cellules up to about the level of the nodus, afterwards a double series (neuration otherwise not complicated). Twenty-one or twenty-two antecubital nervules in the anterior wings, eighteen in the posterior. Five cellules between the quadrilateral and the nodus.

Head and thorax black. Abdomen bright red.

Labium pale yellow. A broad margin to the labrum, a spot on either side of it, the orbits anteriorly, the vertical portion of the rhinarium, a band above it, the lower side of the first antennal joint, all yellow. Postocular spots large, nearly connected by a line, reddish orange.

Prothorax having its posterior margin gently elevated and rounded; the neck, two median spots (geminate), a discal spot on either side, the posterior margin, and a very large spot on either side continued along the margin, reddish orange.

Thorax with broad reddish-orange antehumeral lines, followed by a broader black humeral band which has a projection on its lower edge anteriorly. Sides reddish orange, with an appearance as of two yellow bands and with vestiges of two black lines. Pectus reddish, with two black spots.

Legs reddish; spines black, those on the tibiæ long and divaricate; apex of tarsal joints and tips of claws black.

Abdomen bright red; a spot at the base of first segment, a narrow ring at end of second to fifth, a broad ring at apex of sixth (extended into a line on the sides), the whole of the seventh and eighth (except an apical ring and the ventral margins), black.

 $\sigma$ . The tenth segment is broadly and shallowly excised. Superior appendages longer than the tenth segment, divergent, black, red at the base, stout; the apices inturned and nearly uncinate, broadly dilated at the base inferiorly, the dilated portion inturned and furnished with two black teeth, the lower small, the upper large. Inferior appendages one third shorter, slender, not divergent, acute, slightly incurved, gradually dilated to the base.

**Q**. Unknown.

Length of abdomen,  $\Im$  38 millim.; length of posterior wing 28 millim.; expanse 58 millim.

"Oahu, at no great elevation above the sea" (Blackburn, one male, No. 67).

The neuration in this species is much more regular than in *M. Blackburni*.

The Hawaiian Agrionina probably form a special group; but, excepting in the two large species, I have not considered it prudent to separate them from "Agrion" on account of the apparent impossibility of being able to give characters (other than geographical). In the whole of them the wings cease to be petiolated before the basal postcostal nervule (only slightly before in calliphya), the postocular spots are present (except in pacificum), and the female has no abdominal spine (*i. e.* in those species of which that sex is known). In most of them the tibial spines are long, but not as strikingly so as in Argia. And in nearly all of them (I might say actually in all) there is a striking similarity in male anal characters (reminding one, to some extent, of that which obtains in Agrion Lindenii, but with much longer inferior appendages).